## **CHAPTER 3: EXISTING CONDITIONS, IMPACTS, AND MITIGATION**

This chapter presents new and/or updated information about existing environmental conditions, potential impacts, and mitigation that has been agreed to since the Draft EIS was published. Some commenters provided additional information in their comments on the Draft EIS. Information has also been updated based on ongoing refinements to the design of the proposed project and additional studies. Settlement agreements addressing mitigation for a number of resources (wildlife, greenhouse gas, and others) have been reached between the Applicant and interestedagencies and organizations. Information from the agreements and testimony presented to EFSEC is described and/or referenced in the revisions to the Draft EIS. Copies of the settlement agreements are available from EFSEC.

The main types of revisions made to the Draft EIS are described below; these changes have incorporated revised design information and results of ongoing studies. Those sections of Chapter 3 that are revised follow this summary.

Please note that updated or revised text is enclosed in boxes (as this paragraph has been) to distinguish it from other explanatory text.

- The Applicant has made revisions to the project design since the Draft EIS was published. For example, various chemical storage tank sizes have been increased. Also, pile-supported concrete foundations would be used for all major equipment items and buildings, and the Applicant would construct, own, and operate the cogeneration facility's natural gas supply connection, associated piping, and natural gas compressor station within the refinery. These design changes and others are described in Chapters 1 and 2 and summarized below where they relate to specific environmental resources.
- The air quality analysis (Section 3.2) has been revised and expanded based on updated information from the Applicant and in response to comments on the Draft EIS. Additional information on secondary particulate, estimates of actual emissions from the cogeneration facility, emissions during startup and shutdown, and measures to mitigate greenhouse gases have been added to the section. Information from the review process for the Prevention of Significant Deterioration (PSD) permit is also described in the section. Unlike other sections of this Final EIS, Section 3.2 has been reprinted in its entirety.
- Figure 3.3-8 (Section 3.3) has been updated to reflect the current location of the stormwater detention pond and the cooling water tower. In addition, as a measure to minimize the potential drainage impact on Wetland C, the Corps of Engineers will not permit the Applicant to install a perimeter ditch along the west side of Wetland C. The perimeter ditch in this location has therefore been deleted as a mitigation measure. Also, the identification of additional recommended mitigation measures has been deleted from this section and all other applicable sections in the Final EIS.
- Since the Draft EIS was published, EFSEC has issued a draft State Waste Discharge permit for public comment. The draft permit requires that the Applicant develop a plan to characterize water used for hydrostatic testing and to specify criteria that will need to be met before the water is discharged to the refinery's wastewater treatment system, including a disposal option if these criteria are exceeded.

- Based on comments received on the Draft EIS, the discussion of secondary and cumulative impacts has been expanded in some sections, in particular because such impacts may apply to other development in the area, such as the BP Refinery ISOM Project.
- Based on a Settlement Agreement between the Applicant and Whatcom County, additional mitigation measures have been included in Section 3.9 for noise emissions and Section 3.7 for potential impacts on local heron populations.
- Information from the WDFW Priority Habitat and Species database has been added to Section 3.7, and additional information on the potential impacts resulting from the discharge of treated wastewater on the herring stock in the Strait of Georgia has been included in this section.
- Table 3.8-4 has been revised and a new table has been added to Section 3.8 (Energy and Natural Resources). The revised Table 3.8-4 lists generation facilities currently under construction in Washington. The new Table 3.8-7 presents a summary of proposed combustion turbine facilities in the Pacific Northwest. In addition, Section 3.8.4 (Secondary and Cumulative Impacts) has been updated.
- The description of potential noise impacts resulting from operation of the proposed project has been updated and clarified in Section 3.9. Also, based on a Settlement Agreement between the Applicant and Whatcom County, additional noise mitigation measures have been added to this section.
- Since the Draft EIS was published, the Corps has consulted with the State Historic Preservation Office (SHPO) regarding potential impacts on cultural resources. SHPO concurred with the Corps' conclusion of No Historic Properties Affected and also concurred with the Corps' proposed mitigation measures to protect cultural resources should they be discovered during construction. These mitigation measures have been included Section 3.14.
- The Applicant and WSDOT have agreed on additional traffic mitigation measures that were described in a Letter of Understanding between the Applicant and WSDOT. The measures have been included in Section 3.15.
- Additional information on transportation and storage of anhydrous ammonia and the method to control bacteria growth in the cooling water tower has been included in Section 3.16.

The following sections of the Draft EIS were not revised and are therefore not discussed further in this Final EIS:

- Section 3.6 Agricultural Land, Crops, and Livestock
- Section 3.11 Visual Resources, Light, and Glare
- Section 3.12 Population, Housing, and Economics
- Section 3.17 Relationship Between Short-Term Uses of the Environment and the Maintenance and Enhancement of Long-Term Productivity
- Section 3.18 Irreversible or Irretrievable Commitment of Resources